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The status and Claims in the Application are as follows:

CLAIMS:

1. (Currently Amended) A method of revascularizing a portion of a patient's myocardium comprising:
positioning an active electrode in close proximity to a target site on a wall of the patient's heart wherein the active electrode comprises an electrode array including a plurality of isolated electrode terminals;
contacting the active electrode with an electrically conducting fluid disposed in a space between the active electrode and the target site;
inducing discharge of energetic electrons and photons from the conducting fluid by applying a sufficient high-frequency voltage between the active electrode and a return electrode;
and
directing the energetic electrons and photons to ablate tissue at the heart wall to form a revascularizing channel through at least a portion of the heart wall.
2. (Previously Presented) The method of claim 1, further comprising axially translating the active electrode surface through the portion of the heart wall to form the revascularizing channel.
3. (Original) The method of claim 1, further comprising:
introducing at least a distal end of an electrosurgical catheter into the ventricle of the heart; and
positioning the distal end of the catheter in close proximity to the endocardium.
4. (Previously Withdrawn)
5. (Previously Withdrawn)
6. (Original) The method of claim 1, wherein the voltage is applied continuously between the active and return electrodes.

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7. (Original) The method of claim 1, wherein the voltage is applied in pulses to correspond to beating of the patient's heart.
8. (Cancelled)
9. (Previously Withdrawn)
10. (Currently Amended) The method of claim 1[[8]], further including independently controlling current flow from at least two of the electrode terminals based on impedance between the electrode terminal and the return electrode.
11. (Original) The method of claim 1, further comprising forming a revascularizing channel with a lateral dimension of about 1.5 to 3.0 mm.
12. – 14. (Previously Withdrawn)
15. (Currently Amended) The method of claim 1[[8]], wherein the electrode terminals are embedded in an insulating matrix to electrically isolate each terminal, the insulating matrix comprising an inorganic material.
16. (Currently Amended) The method of claim 1[[8]], wherein the plurality of return electrodes are ~~electrode is~~ proximally recessed from the active electrode terminals.
17. (Currently Amended) The method of claim 1[[8]], wherein the return electrode and the active electrode terminals are disposed on a distal surface of an electrosurgical probe.
18. – 22. (Previously Withdrawn)

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23. (ORIGINAL) The method of claim 1, further comprising the step of determining when the active electrode surface has substantially penetrated through the heart wall.

24. (ORIGINAL) The method of claim 23, further comprising terminating the high frequency voltage before the active electrode surface pierces an opposite wall surface of the heart wall.

25. (Previously Withdrawn)

26. (Previously Presented) The method of claim 1, wherein the active electrode is axially translated through at least a portion of the heart wall at a substantially constant rate.

27. – 40. (Previously Withdrawn)

41. (Previously Presented) The method of claim 1, wherein the electrically conductive fluid provides a conductive pathway between the active electrode and the return electrode.

42. (Previously Presented) The method of claim 1, wherein the electrically conductive fluid is isotonic saline.

43. (Previously Presented) The method of claim 1, wherein the channel is formed by a volumetric removal of the target tissue.

44. (Previously Presented) The method of claim 1, wherein the applied high-frequency voltage comprises a peak-to-peak voltage between 40 to 4000 volts.

45. (Previously Presented) The method of claim 1, wherein the applied high-frequency voltage comprises a peak-to-peak voltage between 100 to 3200 volts.

46. (Previously Presented) The method of claim 1, wherein the applied high-frequency voltage comprises a peak-to-peak voltage between 300 to 2400 volts.

47. (New) A method of revascularizing a portion of a patient's myocardium comprising:

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positioning an active electrode in close proximity to a target site on a wall of the patient's heart;

contacting the active electrode with an electrically conducting fluid disposed in a space between the active electrode and the target site;

inducing discharge of energetic electrons and photons from the conducting fluid by applying a sufficient high-frequency voltage between the active electrode and a return electrode, the return proximally recessed from the active electrode; and

directing the energetic electrons and photons to ablate tissue at the heart wall to form a revascularizing channel through at least a portion of the heart wall.

48. (New) A method of revascularizing a portion of a patient's myocardium comprising:

positioning an active electrode in close proximity to a target site on a wall of the patient's heart, the active electrode extending from the distal end of a probe;

contacting the active electrode with an electrically conducting fluid disposed in a space between the active electrode and the target site;

inducing discharge of energetic electrons and photons from the conducting fluid by applying a sufficient high-frequency voltage between the active electrode and a return electrode, the return proximally recessed from the active electrode; and

directing the energetic electrons and photons to ablate tissue at the heart wall to form a revascularizing channel through at least a portion of the heart wall.

49. (New) A method of revascularizing a portion of a patient's myocardium comprising:

positioning an active electrode in close proximity to a target site on a wall of the patient's heart, wherein the active electrode comprises an electrode array including a plurality of isolated electrode terminals;

directing an electrically conducting fluid in a space between the active electrode and the target site; and

applying high-frequency voltage between the active electrode and a return electrode to ablate tissue at the heart wall to form a revascularizing channel through at least a portion of the heart wall.

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50. (New) A method of revascularizing a portion of a patient's myocardium comprising:
- positioning an active electrode in close proximity to a target site on a wall of the patient's heart;
 - directing an electrically conducting fluid in a space between the active electrode and the target site;
 - applying high-frequency voltage between the active electrode and a return electrode to ablate tissue at the heart wall to form a revascularizing channel through at least a portion of the heart wall; and
 - removing the ablated tissue through a lumen.